

Misbehaving Reflexives in Korean and Mandarin

Author(s): David A. Zubin, Soon Ae Chun and Naicong Li

Proceedings of the Sixteenth Annual Meeting of the Berkeley Linguistics Society (1990), pp. 338-352

Please see “How to cite” in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

Misbehaving Reflexives in Korean and Mandarin*

David A. Zubin, Soon Ae Chun and Naicong Li
State University of New York at Buffalo

The vast literature on reflexive morphemes and constructions tends to reflect a set of assumptions concerning reflexive phenomena.¹ 1) There is a tendency to divide uses of reflexive morphemes into distinct types, for example: locally bound, long distance bound, logophoric, point-of-view, intensifying, contrastive, volitional, medio passive, aspectual, etc. 2) Some of these are taken to be conceptual, others to be syntactic, with a sharp boundary between them. 3) The locally bound instances are taken to be central well behaved cases and the more conceptually laden uses are seen as peripheral misbehaving ones. 4) Conceptual uses are claimed to be derivative. For example, logophoric uses are seen as a conceptual analog of the syntactic relation between anaphor and antecedent within the clause.

This paper will argue for a position that in essence reverses the background assumptions given above by providing evidence for the following claims. 1) All uses of reflexive forms in a given language can be shown to be conceptually related within a cognitive semantic framework. Underlying the uses of reflexives in Mandarin and Korean is an abstract indexical system in some ways analogous to the 1st-2nd-3rd person system of interactional discourse. 2) Contrastive and perspectival uses of reflexives most directly reflect this conceptual system and therefore are the most central uses. 3) In narrative discourse there is a continuum from totally free through long distance to clause bound reflexives. The maximally acceptable binding distance reflects degree of identification with the character's psychological perspective. 4) Locally bound reflexives can be viewed as a conventionalized, desemanticized version of perspective.

1. Indexical Systems. The starting point for an analysis capable of integrating the full range of reflexive morpheme uses in Mandarin and Korean is, we argue, the indexical system of Figure 2, which is contrasted for didactic reasons with the familiar indexical system based on the speech situation in Figure 1. Just as 1st, 2nd and 3rd person set up a conceptual polarity indexing the speech situation of interactional discourse, as in Figure 1, Mandarin and Korean have forms which, we propose, constitute an analogous indexical system not based on the speech situation, as in Figure 2. This perspectival system is constituted by an abstract polarity between a center and a periphery, the poles being occupied by abstract actors whom we will call SELF and OTHER.

Forms	speech situation participants
I	speaker
You	intended addressee
S/He	Neither
structure of deictic field	

Figure 1:
Speech Situation Indexical System

Forms		participants
Mandarin	Korean	
zìjǐ	caki	SELF
bieren	nam	OTHER(S)
structure of deictic field		

Figure 2:
Perspective Indexical System

The nature of the perspective indexical system can be brought out by specifying some of its properties. First, and crucial for the analysis, it is typically used to set up a contrast between an abstract SELF and OTHER as in the Korean and Mandarin proverbs in (1) and (2).

- (1) *NAM-uy il-ey sinkyeng-ul nemu ssu-m CAKI il-ey soholhakey twointa.*
 OTHER-GEN work-LOC concern-ACC too have-if, SELF work-LOC neglect
 'If one is too concerned about OTHER's business, one would neglect SELF's work.'
- (2) *Biérén de kùnnán jùshì ziji de kùnnán.*
 OTHER GEN difficulty is SELF GEN difficulty
 'OTHER's problem is SELF's problem.' (One should care about OTHERS.)

This contrast is inherently perspectival. SELF is at the center or source of the imposed perspective, while OTHER is in the field, or periphery. Note that both SELF and OTHER are referentially non-specific. However, by the Maxim of Relevance SELF and OTHER can be taken to refer to speaker, addressee, or a 3rd person in appropriate context, showing that the perspectival indexical system is not semantically anchored to the speech situation, as is the familiar one of Figure 1. Figure 3 gives a further set of properties which apply assymetrically to SELF and OTHER.

<u>Property</u>	<u>implicational relation</u>
a. referentiality (cf ex 1 and 2)	SELF > OTHER
b. definiteness	SELF > OTHER
c. number (singularity)	SELF > OTHER
d. speech situation participants (I/You) (cf ex 3)	SELF > OTHER
e. focus (cf ex 4)	SELF > OTHER
f. presupposed in implicit contrast (cf ex 4)	OTHER > SELF
g. spatial deictic orientation: at deictic center (cf ex 5 and 6)	SELF > OTHER

Figure 3: Properties of the Perspective Indexical system.

a) In a proverb context such as examples (1) and (2), both SELF and OTHER may be taken to be non-referential, or again by the Maxim of Relevance both may be taken to refer to specific people. But if only one of them is referential, it can only be SELF. This assymetry is given in the implicational relation on the right of the figure. b&c) SELF is more likely to be definite and singular. d) Example (3) shows that SELF is more easily attached pragmatically to 1st or 2nd person of the speech situation. The speaker can easily use (3a) to admonish herself or the listener, but (3b) is incoherent for this purpose.

- (3) a. *ZIII* (=> speaker/addressee) *yīnggāi guǎn hǎo ZIII de shì.*
 SELF should manage well SELF GEN business
 'SELF should mind SELF's business.' (=> I/you should mind my/your own business.)
- b. ?? *Biérén* (=> speaker/addressee) *yīnggāi guǎn hǎo biérén de shì.*
 OTHER should manage well OTHER GEN business
 ?? 'OTHER should mind OTHER's business.' (=> I/You should mind my/your own business)

e&f) Example (4) shows that SELF is more easily focused, and OTHER more easily presupposed, than the other way around. In (4a) SELF is focused as subject of the clause, while the contrast with OTHER is presupposed by the focus on SELF. The attempt to reverse these roles in (4b) is incoherent, unless other is taken to be referential ('they should mind their own business' is OK).

(4)a. *CAKI-uy il-un CAKI-ka haeya hanta.*
SELF-GEN work-TOP SELF-NOM do should
'SELF should mind SELFs business.' (=> not generic OTHER's business.)

b. ? *NAM-uy il-un NAM-i haeya hanta.*
OTHER-GEN work-TOP OTHER-NOM do should
? 'OTHER should mind OTHER's business.' (generic)
but: They should mind their own business (specific)

g) Finally, SELF is more likely to be at the spatial deictic center, as shown by cooccurrence with the deictic verbs 'come' and 'go' in 5 and 6: (5a) and (6a) are coherent because SELF *goes out from*, and OTHER *comes in to* the deictic center. The (b) versions, which place OTHER at the deictic center, are much less coherent.³

(5)a. *CAKI-ka cikcep chaca-kase NAM-eykey chungkohal pilyo-ka epta.*
SELF-NOM in-person find-go OTHER-DAT advice need-NOM not be
'It is not necessary that SELF should go in person to give advice to OTHERS.'

b. ? *CAKI-ka cikcep chaca-wase NAM-eykey chungkohal pilyo-ka epta.*
SELF-NOM in-person find-come OTHER-DAT advice-ACC need-NOM not be
'It is not necessary that SELF should come in person to give advice to OTHERS.'

(6)a. *NAM-tul-i chaca-wase CAKI-lul panghaehal kwenli-ka epta.*
OTHER-NOM visit-come SELF-ACC bother right-NOM don't have
'OTHERS have no right to come and bother SELF.'

b. ? *NAM-tul-i chaca-gase CAKI-lul panghaehal kwenli-ka epta.*
OTHER-NOM visit-go SELF-ACC bother right-NOM don't have
'OTHERS have no right to go and bother SELF.'

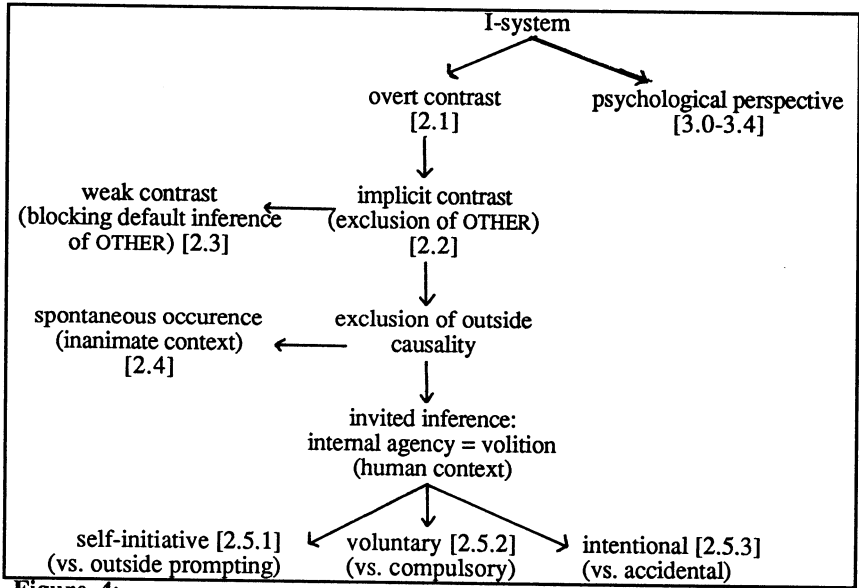


Figure 4:
Radial extension of Pragmatic Inferences from the Perspective Indexical System

2.0 Contrast Inferences. Whereas there appear to be a number of independent “homophonic” uses of SELF-forms in Mandarin and Korean, we will argue that they are all inferentially related, and that they form a radial category (Lakoff, 1987) with the perspective indexical system, clearly manifested in the contrastive proverb uses of examples (1) and (2), at its center. The radial relations of the inferences are depicted in Figure 4.4

2.1. Overt Contrast. Examples (1) and (2) above illustrate the use of the perspective indexical system to express an overt contrast between two participants. In these “proverb” contrasts, all aspects of the underlying system are directly manifested: the non-referentiality of the participants, the polarity between them, and the centering on SELF, with OTHER at the periphery.

2.2. Implicit Contrast. The role of the indexical system is further evident when only the SELF pole is actually expressed (the square brackets in (7) and (8) indicate pragmatic inferences). This implicit contrast is a direct inference from the use of the system for overt contrast, as shown in Figure 4. When SELF is mentioned, but not OTHER, OTHER is inferred to be excluded from the event in question. See also (3a) and (4a).

- (7) *CAKI-ka hal il-un CAKI-ka haca.*
 SELF-NOM doing duty-TOP SELF-NOM do
 ‘SELF should do the duty that belongs to SELF.’ [= not let OTHERS do it].
- (8) *ZIJI dòng shǒu, fēngyīzúshí.*
 SELF move hand abundant-clothing-abundant-food
 ‘Rely on SELF’s work to get a good life.’ [= not on OTHERS].

2.3. Weak Contrast. Furthermore, the assertion may not seem contrastive at all when the contrast mechanism is used to defeat a default inference. We illustrate this with actions directed at body parts. In (9), mouth gagging is normally directed by an agent at another person's mouth, as in (9a). This comes through as a default inference in the version of (9a) with a zero possessor. (9b) illustrates the use of SELF to defeat this default inference, since SELF implies the exclusion of an OTHER in the event. Yet there is no intuitive contrast in (9b) beyond the fact that this type of event is normally directed at someone else. (10) provides a parallel example in Korean.

(9)a *Píngpíng dǔ zhù { tā de / Ø } zuǐ.*
 Pingping gag stop { s/he GEN / Ø } mouth
 'Pingping_i gagged her_j mouth.'

b *Píngpíng dǔ zhù ZIJI de zuǐ.*
 Pingping gag stop SELF GEN mouth
 'Pingping_i gagged her_i mouth.'

(10) *Insu-nun { ku / Ø / CAKI }-uy ttakwi-ul ttaeliessta.*
 Insu-TOP { s/he / Ø / SELF }-GEN cheek-ACC slap
 'Insu_j slapped { his_j / his_j / his_i } cheek.'

Note that for actions which are normally directed at one's own body part, as in (11), the use of an overt SELF-form gives rise to an inference of conscious control (cf section 2.5.3), since there is no default inference of OTHER to block.

(11) *Píngpíng zhǎ le yīxià { Ø / ZIJI de } yǎnjīng.*
 Pingping blink PFV once { Ø / SELF GEN } eye
 'Pingping blinked her eyes / Pingping blinked her eyes (consciously).'

2.4. Spontaneous Occurrence⁵. The next step in Figure 4 is the weakening of a specific outside agent to the vague sense of outside causality. Example (12) shows that a reflexive form may be used with an inanimate actor to exclude generalized outside causality, resulting in an inference of spontaneous occurrence. The inference in (12) is that it wasn't the weather, wind, rain, etc., but that the leaves just drifted down by themselves.

(12) *gānkū de yèzi ZIJI suōsuōde wǎng xià diào.*
 dried NL leaves SELF rustling towards down fall
 'the dry leaves SELF fell down rustling.' Lin Jinlan, Zhu. In Li, p.105

2.5. Volitionality. A further invited inference in Figure 4 may be made from the exclusion of outside causality in the context of a human actor, namely, that agency is unexpectedly internal to the actor. This volitional inference has a variety of specific interpretations.

2.5.1. Unprompted Action For example, when visiting someone else's house one normally waits for refreshments, etc. to be offered, rather than just taking them. The default expectation is thus externally prompted action. But the SELF-form can be used to defeat this expectation, i.e. to shift this specific aspect of causality from external to internal. In (13) the SELF-form leads to the inference that the girl Huang Pingping helped herself to the candy. If the host had offered the candy, the SELF-form would be incoherent.

(13) [Huang Pingping has come to visit an old but powerful man whom she knows has a liking for her]

a. *Huáng Pingping shuō zhe, ZIJI dǎkāi tánghé, tiāojiǎn zhe,*
Huang Pingping speaking DUR SELF open candy-box, choose DUR

b. "Shàngcì lái, hái yǒu jiǔxīn qiǎokèlì ne, zhècì zěnméi méi le?"
last-time come, still have wine chocolate SFP, this-time why no-more CRS

'(a) While speaking, Huang Pingping SELF opened the candy box, choosing among the candies. (b) "Last time when I was here, there were still wine chocolates! How come there isn't any more?"' *Ye yu Zhou: p. 587*

Example (14) gives another type of social situation. The default expectation is that the older, higher status person will initiate the handshake. If the student Insu initiates the handshake, as in (14a), the SELF-form helps to defeat the expectation of external prompting, i.e. from Professor Kim. But if as in (14b) the handshake is initiated by Professor Kim, the expected initiator, a SELF-form is incoherent.

(14) *Kim-kyosu-wa Insu-nun keli-eyse macuchiessta.*
Kim-professor-with Insu-TOP street-on met.

a. *Insu-nun CAKI-ka ap-ulo takaka aksu-lul haessta.*
Insu-TOP SELF-NOM front-to go, handshake-ACC did.
'Insu SELF walked forward and shook hands.'

b. *Kim-kyosu-nun (??CAKI-ka) apulo takaka aksu-lul haessta.*
Kim-prof-TOP SELF-NOM front-to go, handshake-ACC did.
'Professor Kim (??SELF) walked forward and shook hands.'

2.5.2. Voluntary Action. Related to this is the inference that an activity is voluntary against a background default inference of external compulsion. In (15) the introductory context indicates external force. In the subsequent clause SELF invites the inference that the activity was voluntary. Since the two clauses are connected by a concessive conjunction, only (15b) is an acceptable sequel.

(15) *Usa-ka Insu-eyekey yak-ul meki-lyeko haessuna,* 'the doctor tried to
doctor-NOM Insu-DAT medicine-ACC feed-tried-but feed the medicine to
Insu, but...'

a. ? *Insu-nun ku yak-ul mekessta.*
Insu-TOP the medicine-ACC ate. 'Insu took it.'

b. *Insu-nun ku yak-ul CAKI-ka mekessta.*
Insu-TOP the medicine-ACC SELF-NOM ate. 'Insu took it voluntarily.'

2.5.3. Intentional Action. A closely related use of SELF is to defeat the default inference of accidental occurrence, as in (16a). Burning one's fingers normally happens by accident. (16b) shows that adding SELF to the sentence invites the inference of internal causality, in this case intentional action, even though there was no external causality to block. Example (11) provides a parallel case in Mandarin. Figure 5 sums up the volitional inferences.

- (16) a. *Youngi-ka 0 sonkalak-ul pul-ey teyessta.*
 Youngi-NOM fingers-ACC fire-at burned
 'Youngi burned her fingers in the fire (by accident).'
- b. *Youngi-ka CAKI-ka sonkalak-ul pul-ey teyessta.*
 Youngi-NOM SELF-NOM fingers-ACC fire-at burned
 'Youngi burned her fingers in the fire (on purpose).'

default inference	resulting inference	example
activity is socially prompted	unprompted	13, 14
activity is forced	voluntary	15
activity is accidental	intentional	11, 16

Figure 5: Volitional Inferences evoked by SELF.

3.0. Perspectival Inferences. The second set of inferences derived from the perspective indexical system of Figure 2 revolves around the concept of perspective, especially in narrative discourse. Perspective involves a structuring of the text which invites the listener to identify to some degree with one of the characters of the story world, hereafter called the source character. This identification may involve placing oneself in the spatio-temporal location of the source, or knowing about the mental states of the source, or participating in the source's ongoing perceptual or cognitive processes. One way of characterizing these variations in perspective is the extent to which the listener has access to the mental world of the character. In spatio-temporal perspective the most the listener can do is to infer what the source has perceptual access to, and therefore might be thinking or feeling, hence a low degree of access. In a psychological report, to use Wiebe's (1989) term, the listener is given an external characterization of the source character's perceptions, ideas, opinions, emotions, etc., and through this has partial access to the source's mental world. In represented perception and thought, to use Banfield's (1982) term, the text gives the listener a direct rendition of the Here-and-Now of the source character's actual perceptual and cognitive processes, and therefore full access to the source's mind. A simile may help. In spatio-temporal perspective the presentation of the story world is focused at a spatio-temporal center, but the window into the mind of the source character is nearly opaque. The listener can only infer what is going on inside from the source's behavior. In psychological reports this window into the source character's mind is translucent, and in represented perception and thought the mind window is transparent. As the listener has greater and greater access to the source's mind (as the window becomes more and more transparent), the source character as an objective actor in the story world fades more and more into the background. A textual consequence of this backgrounding is the use of constructions which allow deletion of the source, as in English: "A light was visible in the distance."⁶

Figure 6 displays the parallel structuring of the indexical system and the concept of perspective. Whereas the contrast-based uses of SELF (sect. 2) exploit the opposition between SELF and OTHER in the system, the perspectival uses disregard OTHER and exploit the epistemic centering on SELF. Note, for example, that when a proverb based on the I-system (such as (1) and (2)) is applied to a specific person, it is SELF, rather than OTHER, that applies to the person, and the whole is taken to have directive illocutionary force, i.e. to involve the intentions, and thus the mental states of the person. Thus SELF is an invitation not only to focus on the character in question, not only to see things from her point of view, but to enter into her mental world.

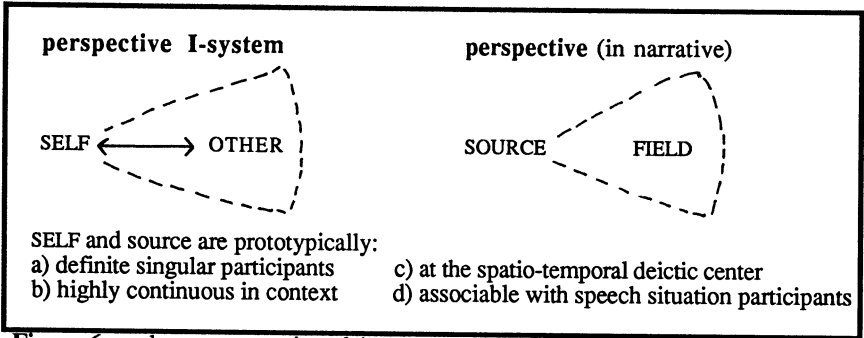


Figure 6: analogous properties of the perspective indexical system and the concept of perspective

3.1. Psychological Perspective and Binding Distance. Figure 7 represents our hypothesis that binding distance correlates with the degree of access to the source character's mind. As access to the character's perceptual and thought processes increases, the more presupposed the character becomes as the source of what is presented in the text. And the more presupposed the character becomes, the less is the need for a proximate antecedent in the text. Note that by the same reasoning 1st person reflexives do not require an antecedent in interactional discourse.

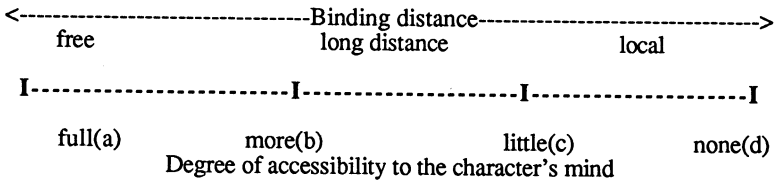


Figure 7: Allowable syntactic distance between SELF and its antecedent, and its relation to the accessibility of the character's mental world.

Point (a) on the continuum represents the fact that in represented thought context occurrences of SELF are syntactically free, in the sense that they do not require an antecedent in the same sentence. Indeed, SELF may itself be sentence subject, and its antecedent may be many sentences back. Point (b) represents the fact that in psychological reports SELF-forms must find their antecedent within the same complex sentence. Pure spatio-temporal perspective (point c) marginally permits long distance binding if a psychological state of the source character is pragmatically inferred. Finally, in non-perspectival contexts (point d) a SELF-form is locally bound, i.e. it behaves like a garden variety clausal reflexive.

3.2. Free Reflexive. Example (17) is typical represented thought from narrative discourse. Note the syntactically free occurrences of SELF in lines d and e, which refer to Yu Gentu. These represent Yu Gentu as an object of his own consciousness, a phenomenon known as reflective thought. Note that when the text shifts out of represented thought at line f, a plain pronoun rather than SELF must be used to represent Yu Gentu. It is important that the SELF form stands for the source's psychological reflection on himself, for this motivates the complete lack of antecedent in the sentence, just as first person reflexives can be unbound in interactional discourse.

Example (18) illustrates the same effect in Korean. The syntactically free occurrence of *caki* in line c is self reflective, and the context is represented thought, indicated e.g. by the rhetorical question and the experiential form of the clause in line e. On the other hand, *caki* in line a is in a psychological report context characteristic of long distance binding, to be discussed in 3.3, and is not self reflective.

(17) [Yu Gentu, the perspectival source, has discovered an ancient tomb, and the unscrupulous Yu Wanggou is trying to trick him into revealing its location.] '(a) Eyes cast down, Yu Gentu did not answer, but his mind was awl: (b) that day, when (he) discovered the old tomb, there had been nobody around! (c) If Yu Wanggou had seen what was happening, wouldn't (he) have come over right there and then? (d) Must be that from far away (he) saw SELF(=YG) digging on the ground, had a suspicion, (e) and now is bluffing SELF(=YG)! This slippery fellow is indeed full of tricks. (f) Thinking like this, (his) mind calmed down somewhat, he lifted up (his) eyes and said, ...'

Gu Mu : p.14

- a. *Yú Gěntǔ chuí zhe yǎnpí bù kēngshēng, xīn lǐ què zài dǎzhuànzhuan:*
 Yu Gentu hang DUR eyelid not make-sound heart in whereas DUR whirl
- b. *nà yītiān, ∅ fāxiàn gǔmù de shíhòu, sìzhōu míngmíng méiyǒu rén na!*
 that one-day, discover old-tomb NL time around clearly no person SFP
- c. *Yàoshì Yú Wanggǒu kànjiàn le, ∅ dāngchǎng hái huì bú guòlái?*
 if Yu Wanggou see PFV there-and-then still would not come-over
- d. *∅ zhǔnshì yuǎnyuǎnde kànjiàn ZUI zài dìxià kōuba, ∅ qǐ le yíxīn,*
 must-be from-far-away see SELF at ground-down dig raise PFV suspicion
- e. *∅ lái zhà ZUI li! Zhè ge huátóu shǒuduàn shì mǎn duō de.*
 come bluff SELF SFP this CL slippery-fellow trick is quite many
- f. *Zhème yī xiǎng, xīn lǐ shāowēi tāshi le xiē, tā tái qǐ yǎn shuō, ..*
 thus once think, heart in slightly steady CRS some he lift up eye say

(18) [Kyounghun and Kyoungsoo are half-brothers who live with their father. The older Kyounghun is reflecting on the younger Kyoungsu's difficulties with their father.]
 'Suddenly Kyounghun felt that SELF was not in a position to either defend Kyoungsoo or to agree with what father said. While SELF was gone, what could Kyoungsoo and father have been thinking, living in the same house with such different perspectives. The desire to smoke overcame Kyounghun.'

- a. *sunkan Kyounghun-un CAKI-ka esaekhakey-nama Kyoungsu-lul onghoha-nun*
 suddenly Kyounghun-TOP SELF-NOM awkwardly-even Kyoungsu-ACC defending
- b. *ipchang-to mot-toi-mye, kulettako apéci-uy mal-ey tongcohal-su-to*
 status-either not-being-and, but-then father-GEN talk-to agree-can-either
- c. *epum-ul nukki-ess-ta. CAKI-ka ep-nun tongan apéci-wa Kyoungsu-nun*
 not-ACC felt SELF-NOM absent period father-and Kyoungsu-TOP
- d. *iletkey selo talun sisen-ul kaciko han cipung-mit-eyse*
 this-way each-other different perspective-ACC having same roof-under-LOC

e. sal-myense muet-ul saengkakha-ess-ul-kka. Kyounghun-nun tampae-ka piuko sip-ess-ta.
 living what-ACC thought-Q Kyounghun-TOP cigarette-NOM smoke wanted

(19) shows that unbound SELF-forms in represented thought context are necessarily self-reflective. It is a passage of non-reflective represented thought in which the source's emotion is directly portrayed in a way for which there is no matching convention in English. Note that the source is represented by zero anaphora, and by plain pronouns in lines (a) and (b), but not by SELF. If *ziji* is substituted for *ta* in lines a and b, the passage becomes self-reflective in the sense that the character is not just experiencing the emotions, but is reflecting on her experience of them.

(19) 'For such a long time she'd been like a thief in the matter of love, like a beggar; pursue, beg, hide -- enough suffering!' Ye yu Zhou : p. 717

a. *Zhème cháng shíjiān yǐlái, tā xiàng shì àiqíng shàng de zéi,*
 such long time since she as-if is love on ASSOC thief

b. *zhuīlái zhūiqù, qiú lái qiú qù, duō lái duō qù, tā shòu gòu le!*
 pursue beg hide she suffer enough CRS!

3.3. Long Distance Binding (LDB). Next we turn to LDB contexts, in which we claim the listener should only have partial access to the source character's mental world, i.e. the sentence should be an explicit or implicit psychological report. In other words, the antecedent of the SELF-form should be the source of perspective in a psychological sense (cf Kuroda 1973). As such a position of syntactic prominence should be preferred, but not required, for the antecedent. This reasoning parallels Kuno's study of empathy in syntax, and is reflected in O'Grady's (1987) accessibility hierarchy for Korean, exemplified in (20). In (20a) SELF has three possible antecedents, but prefers the sentence subject. In (20b) *caki* in Korean cannot be coreferential with first person, and so prefers the direct object over the oblique. But in (20c) the oblique is the only available antecedent⁷.

- (20) a. *Insu-nun Suni-eykey Chelsu-uy iyaki-lul CAKI pang-eyse haecu-ess-ta.*
 Insu-TOP Suni-DAT Chelsu-GEN story-ACC SELF room-in did-give.
 'Insu told Suni a story about Chelsu in SELF's room.' (SELF => Insu)
- b. *na-nun Suni-eykey Chelsu-uy iyaki-lul CAKI pang-eyse haecu-ess-ta.*
 I-TOP Suni-DAT Chelsu-GEN story-ACC SELF room-in did-give.
 'I told Suni Chelsu's story (about Chelsu) in SELF's room.' (SELF => Suni)
- c. *na-nun Chelsu-uy iyaki-lul CAKI pang-eyse tul-ess-ta.*
 I-TOP Chelsu-GEN story-ACC SELF room-in heard
 'I heard Chelsu's story (from Chelsu) in SELF's room.' (SELF => Chelsu)

That the accessibility hierarchy is not the whole story is shown by (21), in which the meaning of the postposition controls the extent to which Chelsu is the psychological source, and correspondingly the acceptability of Chelsu as the antecedent to SELF. The locative *lopute* suggests that Chelsu is the source of information (in Sell's 1987 sense), and therefore of perspective. The circumstantial *eytaehan* does not allow this interpretation. Furthermore, in comparing (20b) and (20c), note that antecedence to *caki* in (20c) coerces a source interpretation on the ambiguous genitive. In order for Chelsu to

be accepted as antecedent to *caki*, the sentence must be interpreted to involve his perspective.

- (21) *na-nun {Chelsu-lopute / *-eytaehan } iyaki-lul CAKI pang-eyse (khachi) tulessta.*
 I-TOP {Chelsu-from/ *-about } story-ACC SELF room-LOC (together) heard.
 'I heard a story from Chelsu / about Chelsu in SELF's room.'

Example (22) supports the claim that with LDB reflexives the real issue is the extent of access to the character's psychological world, not the character's consciousness (too strong), and not the mere spatio-temporal perspective of the character (too weak). In (22a), a perception verb introduces the content of perception. This is a straightforward psychological report, giving the listener limited access to the character's mind, thus licensing the use of SELF in the final clause. In (22b) there is no perception verb, so that on a literal level the sentence encodes only the source's spatio-temporal perspective. But eye-raising is a conventional preparatory act antecedent to visual perception, automatically triggering the inference that Li Rong actually sees the tide. In (22c) leaning up is a posture change that can promote perception, although it is not taken as a conventional preparatory act as in (b). Thus the listener may infer that Li Rong saw the wave,

- (22) *Lǐ Róng zài shātān shàng tiāo le yī kuài dìfāng, tǎng le xiàlái. Shí fēnzhōng hòu,...*

Li Rong at beach on select PFV one CL spot, lie PFV down ten minutes after
 'Li Rong selected a spot on the beach and lay down. Ten minutes later,...

- | | |
|---|-----------------------------------|
| a. <i>tā tái yǎn cháo qián kànqù,</i>
he raise eye towards front look-up | a. he raised his eyes to look up, |
| b. <i>tā tái qǐ yǎn,</i>
he raise up eye | b. he raised his eyes, |
| c. <i>?tā qiànqǐ shēnzi</i>
he raise-up body | c. ?he leaned up, |
| d. <i>*tā chénrù mèngxiāng,</i>
he sink-in dream | d. *he fell asleep, |
| e. <i>Tā rēng wèi zhùyìdào</i>
he still not notice | e. He still did not notice, |

cháoshuǐ zhèng jiànjiàn xiàng ZIJI yǒng lái.
 tide DUR gradually towards SELF surge come
 the tide was gradually coming towards SELF.'

since he was in a position to do so. Indeed, (c) is acceptable *only* if the listener makes this inference. Note that in any case, (c) is worse than (b), but better than (d); (22d) shows that mere spatio-temporal perspective, where psychological inferences are specifically excluded, is not enough to license a LDB reflexive, contrary to Sell's (1987) position. Thus spatio-temporal perspective seems able to license LDB just in case the character's psychological state is exposed. On the other hand, actual consciousness is not the issue with LDB reflexives, as claimed by Hong (1989) and others. In (22e) the approaching wave is explicitly not part of Li Rong's consciousness. However, the entire sentence is a psychological report concerning his awareness of the tide.

There may appear to be a clear break between free reflexives on the one hand, and LDB reflexives on the other. But we believe there are transitional cases, as in (23a) and (b). (23a) is a standard instance of represented, reflective thought in which the occurrences of SELF are syntactically free.

- (23) a. i. *Wáng Líng duìzhe jìngzi dǎliàng zhe ZHĪ de liányīqún.*
 Wang Ling face mirror examine DUR SELF GEN dress
- ii. *ZHĪ de yāo hěn xì. ZHĪ zhēn piàoliàng.*
 SELF GEN waist very thin SELF really pretty
- iii. *Búguò ZHĪ yào zhùyì búyào chī tài yóunì de dōngxī.*
 but SELF should be-careful not eat too fatty NL thing

‘(i) Wang Ling looked in the mirror to check her dress. (ii) SELF was pretty. SELF has small waist. (iii) But SELF should be careful of fatty food.’

In (23b), this self-reflection of Wang Ling's is recast as projected thought: Li Rong is thinking about Wang Ling's opinion of herself, and is making fun of the way she thinks of her looks. Important for us is that the occurrences of SELF take Wang Ling (the projected ego), and not Li Rong (the source) as their antecedent, and yet for the listener only Li Rong's thoughts are directly accessible. In this case we do not get a simple correlation between represented thought and free reflexives.

- (23) b. i. *Lǐ Róng hěn shēngqì. Wáng Líng tài zìgāozìdà le!*
 Li Rong very irritated Wang Ling too conceited CRS
- ii. *ZHĪ piàoliàng, ZHĪ cōngmíng, biérén dōu bǐbúshàng ZHĪ ...*
 SELF pretty SELF smart OTHERS all cannot-compare-with SELF

‘(i) Li Rong felt irritated. Wang Ling was so conceited! (ii) SELF was pretty, SELF was smart, no other person was as good as SELF...’

Occurrences of SELF in LDB contexts have been claimed to be a P-pronominal variant. An important property of P-pronominals is their ability to be non-coreferential, as in (24a). But successive coordinate occurrences of SELF are necessarily coreferential as shown by (24b).

- (24) a. *Tāì yīnggāi gāoxìng cáidui, yīnwei dàjiā dōu xǐhuān tāì/j.*
 he should happy right because everyone all like him
 ‘He_i should be happy, because everyone likes him_{i/j}.’
- b. *ZHĪ yīnggāi gāoxìng cáidui, yīnwei dàjiā dōu xǐhuān ZHĪ_i/*j.*
 SELF should happy right because everyone all like SELF
 ‘SELF_i should be happy, because everyone likes SELF_i/*j.’

This necessary coreference is consonant with the claim that SELF codes the source of a conceptual perspective, so that non-coreference would entail not just shift in referent, but shift in the psychological perspective from which the story world is viewed. Note also that SELF cannot be split into two people in reciprocals, as is the case, for example, with German reflexives. In (25) an overt morpheme for *eachother* must be used, rather than

SELF. Conceptually this means that there cannot be two simultaneous contradictory perspectives coded in the same sentence.⁸

- (25) *Suni-wa Yongi-nun* { *SELOI***CAKI-lul* } *kkyean-ass-ta*.
 Suni-with Yongi-TOP {each other/SELF-ACC} hug.
 ‘Suni and Yonghi hugged (each other).’

3.4. Local Binding. Where do locally bound reflexives fit in the cognitive framework we have set up for the analysis of SELF-forms? Examples (26) and (27) address this final issue. In (26) the introductory adverbial clauses (a) and (b) provide syntactically equivalent antecedents for the SELF-form in the following clause: (a) is a perspectival introduction, since it sets up Insu as a source; (b) is a non-perspectival introduction: although Insu is mentioned, the speaker does not take his point of view. Note that only (a), the perspectival introduction, provides an acceptable antecedent to the SELF-form. This confirms the previous data showing that the LDB relation must be accompanied by the character’s psychological perspective, as claimed by Kuno and others.

- (26) *Suni-nun himcue malha-ess-ta*. ‘Suni spoke bluntly:
 Suni-TOP firmly spoke.
- a. “*Insu-uy kwancem-eyse po-myeon*, ‘From Insu’s point of view...
 Insu-GEN point-of-view-from see-if,
- b. ?? “*Insu-eytaehae malhaca-myeon*, “Speaking of Insu...
 Insu-about saying-if,
- i *saken-un CAKI-hantae khun sonhae-lul cu-ess-ta*” the accident hurt SELF badly.”
 this accident-TOP SELF-to big damage-ACC affected.

Example (27) is exactly equivalent to (26), except that now there is an available antecedent within the clause, and the non-perspectival introduction of (27b) is now acceptable. This suggests that the local-binding relation does not entail the perspective of a source the way the LDB relation does. However, within clauses such as (27b) O’Grady’s accessibility hierarchy still seems to hold, suggesting that even in the absence of an actual perspectival source, the grammatical subject is still the preferred antecedent of a SELF-form.

- (27) *Suni-nun himcue malha-ess-ta*. ‘Suni spoke bluntly:
 Suni-TOP firmly spoke.
- a. “*Insu-uy kwancem-eyse po-myeon*, ‘From Insu’s point of view...
 Insu-GEN point-of-view-from see-if,
- b. “*Insu-eytaehae malhaca-myeon*, “Speaking of Insu...
 Insu-about saying-if,
- ku-nun CAKI-hantae khun sonhae-lul cu-ess-ta*” he hurt SELF badly.”
 he-TOP SELF-to big damage-ACC gave.

This suggests that Kuno’s intuition about the empathy effect with locally-bound reflexives is correct. They seem to be a syntactic fossilization of the perspective phenomenon in discourse.

4. Conclusion. Unlike syntax-based analyses which consider clause-bound reflexives as a starting point and LDB reflexives as an extension of this syntactic environment, but

which have little to say about free reflexives, we have presented an analysis which takes syntactically free occurrences of reflexive morphemes in contrastive and represented thought contexts as a starting point and extended the analysis into the domain of LD and local binding. This approach has the advantage of showing how apparently unrelated uses of reflexives can be derived from a unitary source: the perspectival indexical system. On the other hand, it may not be able to account for all the syntactic details of long-distance binding, and has little to say about local binding of reflexives, although it is not in conflict with it. We thus regard the syntactic and the discourse-semantic approaches to the problem as complementary rather than antagonistic.

NOTES

* This research was supported in part by National Science Foundation Grant No. IRI-8610517. We would like to express our gratitude to members of the Deictic Center Research Project of the Center for Cognitive Science at SUNY, Buffalo for their comments and discussions. Special thanks go to Matthew Dryer, Mary Galbraith, George Lakoff, Joongwon Park, Jackson T.-S. Sun, Randy J. LaPolla, Dan Devitt, Fengxiang Li, Eve Sweetser and Dingxu Shi for their comments on the earlier version of this paper.

¹ See Reinhart (1983) for the standard binding analysis; Tang (1989) and Cole et al. (1989) for a syntactic approach and Kuroda (1973), Kuno (1987) and Sells (1987) for conceptually-based approaches to long distance binding; and Zribi-Herz (1989) for unbound reflexives. The latter provides a current overview of issues. Although these assumptions are characteristic of the literature, not all of them are consistently held. For example, Kuno (1987 and earlier) has consistently argued that empathy licenses long distance reflexives; and Zribi-Herz argues that unbound occurrences of SELF-forms in represented thought are an autonomous phenomenon based on "subject of consciousness." Van Hoek(1990) provides a unified cognitive semantic account of reflexives in English equivalent in spirit to our treatment of Korean and Mandarin reflexives.

² In this paper we alternate data from Korean and Mandarin because the two languages show parallel behavior with respect to most of the phenomena discussed. Mandarin does not allow non-subject controllers to the extent that Korean does (see ex 20). Korean has an additional reflexive morpheme casin which occurs in 1st and 2nd person clause-bound contexts, to the exclusion of caki. Our data show, however, that caki does occur in 3rd person clause-bound contexts, and casin in free contexts, so that the claim that casin is a bound and caki a free pronoun is too simplistic (cf Cole et al. 1990). We are aware of the caki-casin problem, but do not address it here.

³ These judgements pertain to a non-referential reading. A specific referent for OTHER can be placed at the deictic center, e.g. if OTHER is taken to be the addressee.

⁴ George Lakoff (personal communication) points out that the radial category in figure 4 can be collapsed in the context of a frame semantic analysis. For example, the volitional inferences at the bottom of the table are only illustrative of a wide range of variations produced by the imposition of very specific situation frames.

⁵ Korean does not allow this specific inference, but has a separate morpheme for it cecelo.

⁶ Korean psych-verbs are much more likely to have an unexpressed (zero) experiencer in the experiential construction (represented thought) than they are in the agentive construction (psychological report)--see Chun & Zubin, 1990 in this volume.

⁷ In Madarin only the subject is accessible as antecedent in (20).

⁸ We have found complex cases of syntactically adjacent non-coreferential occurrences of SELF which involve projected thought, that is, the embedding of one character's perspective in the reflective consciousness of another character, as in (23b).

REFERENCES

- BANFIELD, A. 1982. *Unspeakable sentences*. Boston :Routledge and Kegan Paul.
- CHO, YOUNGMEE YU. 1985. An LFG analysis of the Korean reflexive *caki*. *Proceedings of Harvard Linguistics Workshop*.
- CHUN, SOON AE AND ZUBIN, DAVID A. 1990. Experiencial vs. agentive constructions in Korean narrative. In this volume.
- CLEMENTS, GEORGE N. 1975. The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Languages* 10.141-77.
- COLE, P., G. HERMON and L.-M. SUNG. 1990. Principles and Parameters of Long-Distance Reflexives. *Linguistic Inquiry* 21.1-22.
- HONG, KI-SUN. 1989. Consciousness condition on the Korean reflexive *caki*. *Berkeley Linguistics Society* 15.
- KURODA, S.-Y. 1973. Where epistemology, style and grammear meet: A case study from Japanese. *A Festschrift for Morris Halle*, eds. by S. Anderson and P. Kiparsky, 377-391. New York: Holt, Rinehart & Winston.
- KURODA, S.-Y. 1976. Reflections on the foundations of narrative theory. *Pragmatics of language and Literature*, ed. by T.A. Van Dijk. Amsterdam: North-Holland Publishing Company.
- KUNO, SUSUMU. 1987. *Functional syntax*. Chicago: University of Chicago Press.
- KUNO, SUSUMU. 1973. *The Structure of the Japanese language*. Cambridge, Mass.: MIT Press.
- LI, RENJIAN. 1984. On *ziji* and constructions with *ziji*. *Zhongguo Yuwen* 179.102-7.
- O'GRADY, WILLIAM. 1987. The interpretation of Korean anaphor. *Language* 63.251-77.
- RAPAPORT, WILLIAM J., et al. 1989. Deictic centers and the cognitive structures of narrative comprehension. Tech Report 89-01: Dept. of Computer Science, University at Buffalo.
- REINHART, TANYA. 1983. *Anaphora and semantic interpretation*. Chicago: U. Chicago Press.
- SELLS, PETER 1987. Aspects of logophoricity. *Linguistic Inquiry* 18.445-79.
- SUN, JACKSON T.-S. 1989. *Toward explaining reflexive constructions in Mandarin Chinese*. ms. Berkeley.
- TANG, CHIH-CHEN J. 1989. *Chinese reflexives*. *Natural Language & Linguistic Theory* 7.193-21.
- VAN HOEK, KAREN. 1990. *Dissertation in progress*. UCSD.
- WIEBE, JANYCE. 1989. *Recognizing subjective sentences*, Ph.D. diss. U. at Buffalo.
- ZRIBI-HERTZ, ANNE. 1989. Anaphor binding and narrative point of view: English reflexive pronouns in sentence and discourse. *Language* 65.695-727.

TEXT REFERENCES

- HAN, SOOSAN. 1980. *Haepingki-uy achim*. vol 2. Seoul.
- KE, YUNLU. 1986. *Ye yu Zhou*. Renmin Wenxue. Beijing.
- XU XIAOYU, 1982. *Gu Mu*. Shouhuo, no. 5. Beijing.